Annual Index
Westinghouse ENGINEER
Volume 32, 1972

Subject Index

PS . . . Products and Services
TP . . . Technology in Progress

A

Air cleaner, electronic. PS. Jan. p32.
Air conditioning
dual system provides flexible zone control. TP. May. p94-5.
thermoelectric unit being tested by Navy. TP. Jan. p29.
Airborne warning and control system (AWACS). See Radar.
Airport. See Transportation.
Automatic train control. See Transportation.

B

Bay Area Rapid Transit (BART). See Transportation.
Baystate West. See Urban development.
Blower, designing heavy-duty blower rotors for reliability. J. H. Hoffman. Sept. pl34-8.
Bus duct, one-design system. PS. Mar. p63-4.

C

Camera. See Televison.
Cement. See Drive.
Chesapeake Bay. See Environment.
Circuit breaker
type R vacuum. PS. Jan. p32.
See also Fuse; Testing.
Coal gasification. See Power generation.
Color. See Lighting.
Computer
additional measures of generation reliability. P. B. Shortley. Jan. p26-7.
minicomputer takes on data processing jobs. Jan. Inside front cover.
programmer's aides. PS. July. p128.
selecting a process control computer. V. Pearce. May. p74-8.
software systems for minicomputer. PS. May. p96.
stability program simulates loss of generator field. TP. Nov. p189.
training center teaches use and maintenance of control systems. TP. May. p93-4.
See also Relaying.
Construction. See Housing; Urban development.
Control system. See Computer; Power plant.

D

Design. See Industrial design.
Distribution system
Bryant Spec-eeze. PS. Jan. p32.
See also Switch.
Diving system. See Marine.
Drive
evaluating drives for large grinding mills. J. G. Trasky and A. H. Hoffmann. Jan. p19-25.
hi-torque adjustable speed. PS. Sept. p160.
largest paper machine relies on advanced drive systems. May. p84-6.

E

Education
statistics for problem solving and decision making. PS. Jan. p32.
See also Computer; Nuclear energy.
Electric home heating, wall heaters. PS. May. p96.
Electric plug, safety design. PS. Mar. p64.
Electric power generation. See Power generation.
Elevator, fast and versatile elevators will serve Sears tower. TP. July. p127.
Engineering. See Mathematics.
Environment
automated system monitors water temperature profiles. TP. Mar. p62-3.
Chesapeake Bay areas get environmental study. TP. Mar. p61.

F

Fan. See Blower.
Fast flux test facility (FFTF). See Nuclear energy.
Flowmeter, water flow measurement service. PS. Mar. p64.
Fort Lincoln. See Urban development.
Fuse, power fuse design and application. F. L. Cameron and D. R. Smith. May. p87-92.

G

Generation. See Computer.
Generator
hydroelectric and steam generators in construction. Jan. Back cover.
plant expansion enlarges production capacity. TP. Jan. p28.
stator for TVA. Sept. Back cover.
George Washington University. See Urban development.
Grinding mill. See Drive.

H

Highway. See Lighting.
Housing, a developer/builder's view of the housing market. R. S. Garrett. July. p110-9.
Hyperbaric chamber. See Marine.

I

Industrial design, illustrated answers to the ten most common questions about industrial design. E. Izzi and R. Caplan. July. p104-9.

L

Laboratory. See Testing.
Laminations, core. See Transformer.
Lamp
Skylab's portable light units. TP. July. p126-7.
strengthening metal with bubbles. H. G. Sell and R. Stickler. Jan. p14-8.
See also Lighting.
Lawndale Center. See Urban development.
Lighting
improving the performance of lamp dimmers. G. A. Kappenhagen. July. p120-4.
mercury-vapor illuminates parking garage. TP. Jan. p28-9.
relating commercial uses of color to human color vision. W. A. Thornton. Nov. p170-5.
Shirley Highway gets brighter look. July. Inside front cover.
Liquid-metal fast breeder reactor (LMFBR). See Nuclear energy.

M

Mapping. See Radar.
Marine
pressure-chamber tests of Deepstar simulate 2300-foot dive. TP. Sept. p157.
respiratory heat loss determined in deep diving tests. J. E. Hudgens. May. p79-81.
See also Air conditioning.
Mathematics, modern applied mathematics and the engineer. R. Hooke. Jan. p9-13.
Metallurgy. See Lamp.
Meter
D4S watt-hour. PS. July. p128.
portable ac ammeters. PS. May. p96.
portable frequency. PS. Mar. p64.
Mining
battery-powered transporters. PS. July. p128.
See also Drive.
Monitoring. See Radiation monitoring.
Motor
apparatus service expanded. May. Inside front cover.
high-speed PATH cars. TP. Mar. p60.
integral-horsepower. PS. Jan. p31.
large pump motors will serve California water project. Mar. Inside front cover.
See also Drive; Power supply.

N

Nuclear energy
fast reactor safety book. PS. Mar. p63.
FFTF test facility nears completion. TP. May. p94.
floating nuclear power plants for offshore siting. A. R. Collier and R. C. Nichols. Nov. p162-9.
large stop valves serve PWR primary loops. TP. Sept. p157-9.
Saxton core III examined, found in good condition. TP. Jan. p29-30.

Annual Index
Westinghouse ENGINEER
Volume 32, 1972

Subject Index

PS . . . Products and Services
TP . . . Technology in Progress

A

Air cleaner, electronic. PS. Jan. p32.
Air conditioning
dual system provides flexible zone control. TP. May. p94-5.
thermoelectric unit being tested by Navy. TP. Jan. p29.
Airborne warning and control system (AWACS). See Radar.
Airport. See Transportation.
Automatic train control. See Transportation.

B

Bay Area Rapid Transit (BART). See Transportation.
Baystate West. See Urban development.
Blower, designing heavy-duty blower rotors for reliability. J. H. Hoffman. Sept. pl34-8.
Bus duct, one-design system. PS. Mar. p63-4.

C

Camera. See Televison.
Cement. See Drive.
Chesapeake Bay. See Environment.
Circuit breaker
type R vacuum. PS. Jan. p32.
See also Fuse; Testing.
Coal gasification. See Power generation.
Color. See Lighting.
Computer
additional measures of generation reliability. P. B. Shortley. Jan. p26-7.
minicomputer takes on data processing jobs. Jan. Inside front cover.
programmer's aides. PS. July. p128.
selecting a process control computer. V. Pearce. May. p74-8.
software systems for minicomputer. PS. May. p96.
stability program simulates loss of generator field. TP. Nov. p189.
training center teaches use and maintenance of control systems. TP. May. p93-4.
See also Relaying.
Construction. See Housing; Urban development.
Control system. See Computer; Power plant.

D

Design. See Industrial design.
Distribution system
Bryant Spec-eeze. PS. Jan. p32.
See also Switch.
Diving system. See Marine.
Drive
evaluating drives for large grinding mills. J. G. Trasky and A. H. Hoffmann. Jan. p19-25.
hi-torque adjustable speed. PS. Sept. p160.
largest paper machine relies on advanced drive systems. May. p84-6.

E

Education
statistics for problem solving and decision making. PS. Jan. p32.
See also Computer; Nuclear energy.
Electric home heating, wall heaters. PS. May. p96.
Electric plug, safety design. PS. Mar. p64.
Electric power generation. See Power generation.
Elevator, fast and versatile elevators will serve Sears tower. TP. July. p127.
Engineering. See Mathematics.
Environment
automated system monitors water temperature profiles. TP. Mar. p62-3.
Chesapeake Bay areas get environmental study. TP. Mar. p61.

F

Fan. See Blower.
Fast flux test facility (FFTF). See Nuclear energy.
Flowmeter, water flow measurement service. PS. Mar. p64.
Fort Lincoln. See Urban development.
Fuse, power fuse design and application. F. L. Cameron and D. R. Smith. May. p87-92.

G

Generation. See Computer.
Generator
hydroelectric and steam generators in construction. Jan. Back cover.
plant expansion enlarges production capacity. TP. Jan. p28.
stator for TVA. Sept. Back cover.
George Washington University. See Urban development.
Grinding mill. See Drive.

H

Highway. See Lighting.
Housing, a developer/builder's view of the housing market. R. S. Garrett. July. p110-9.
Hyperbaric chamber. See Marine.

I

Industrial design, illustrated answers to the ten most common questions about industrial design. E. Izzi and R. Caplan. July. p104-9.

L

Laboratory. See Testing.
Laminations, core. See Transformer.
Lamp
Skylab's portable light units. TP. July. p126-7.
strengthening metal with bubbles. H. G. Sell and R. Stickler. Jan. p14-8.
See also Lighting.
Lawndale Center. See Urban development.
Lighting
improving the performance of lamp dimmers. G. A. Kappenhagen. July. p120-4.
mercury-vapor illuminates parking garage. TP. Jan. p28-9.
relating commercial uses of color to human color vision. W. A. Thornton. Nov. p170-5.
Shirley Highway gets brighter look. July. Inside front cover.
Liquid-metal fast breeder reactor (LMFBR). See Nuclear energy.

M

Mapping. See Radar.
Marine
pressure-chamber tests of Deepstar simulate 2300-foot dive. TP. Sept. p157.
respiratory heat loss determined in deep diving tests. J. E. Hudgens. May. p79-81.
See also Air conditioning.
Mathematics, modern applied mathematics and the engineer. R. Hooke. Jan. p9-13.
Metallurgy. See Lamp.
Meter
D4S watt-hour. PS. July. p128.
portable ac ammeters. PS. May. p96.
portable frequency. PS. Mar. p64.
Mining
battery-powered transporters. PS. July. p128.
See also Drive.
Monitoring. See Radiation monitoring.
Motor
apparatus service expanded. May. Inside front cover.
high-speed PATH cars. TP. Mar. p60.
integral-horsepower. PS. Jan. p31.
large pump motors will serve California water project. Mar. Inside front cover.
See also Drive; Power supply.

N

Nuclear energy
fast reactor safety book. PS. Mar. p63.
FFTF test facility nears completion. TP. May. p94.
floating nuclear power plants for offshore siting. A. R. Collier and R. C. Nichols. Nov. p162-9.
large stop valves serve PWR primary loops. TP. Sept. p157-9.
Saxton core III examined, found in good condition. TP. Jan. p29-30.

Nuclear energy (*continued*)
standard information package benefits nuclear plant licensing and construction. W. H. Arnold, Jr., and D. R. Grain. Sept. p130-3.
steam generator designed for LMFBR demonstration plant. TP. Jan. p30-1.
steam generators delivered to Trojan plant. TP. Nov. p189.
Zion training center prepares personnel for power plants. TP. July. p125-6; Back cover.
See also Radiation monitoring.

O

Office components, modular. PS. Mar. p64.

P

Paper mill. See Drive.
Parking garage. See Lighting.
Plant. See Generator; Transformer.
Power generation, coal gasification process being developed. TP. May. p93.
Power plant
analog instrumentation. PS. Sept. p160.
modular construction facilitates control-system packaging. TP. Sept. p159.
See also Nuclear energy; Radiation monitoring.
Power supply
consultant's guide book. PS. Sept. p160.
mini-power center. PS. May. p96.
static power supplies with ac machines. S. J. Campbell. Mar. p34-8.
Power system
protective device coordination program. PS. Mar. p64.
See also Computer; Fuse; Relaying.
Pressurized water reactor (PWR). See Nuclear energy.
Process control. See Computer.
Pump. See Motor.

R

Radar
AWACS readied for evaluation. TP. May. p94; Back cover.
side-look radar provides a new tool for topographic and geological surveys. R. E. Powers. Nov. p176-81.
tactical air defense systems developed. TP. Nov. p188.
Radiation monitoring, system for nuclear power plants. S. A. Lane, C. Griesacker, and T. Hamburger. Jan. p2-8.
Radiography. See X-ray.
Rapid transit. See Motor; Rectifier; Transportation.
Reactor, nuclear. See Nuclear energy.
Rectifier
cubicles for Chicago Transit Authority. TP. Mar. p61-2.
fast semiconductor shipment results from new manufacturing methods. TP. Mar. p63; Back cover.
Regulator. See Drive.
Relaying
carrier start distance. PS. Sept. p160.
guidelines for selecting a solid-state transmission line relaying system. W. A. Elmore. Mar. p50-9.
what are the prospects for substation-computer relaying? G. D. Rockefeller. Sept. p152-6.

S

São Paulo Metro cars. See Transportation.
Semiconductor. See Rectifier.
Steam generator. See Nuclear energy.
Switch
load interrupter. PS. Jan. p31.
lockout. PS. Jan. p31.
T-Tap switch solves a variety of URD problems. R. K. Peterson. Nov. p182-7.
Switchgear, sine-beat vibration testing verifies earthquake capability of metal clad switchgear. E. G. Fischer and A. P. Colaiaco. May. p82-3.

T

Television
solid-state tuner. Sept. Inside front cover.
sub-miniature TV camera. J. H. Meacham. Mar. p39-43.
TEM cameras. PS. July. p128.
See also Lighting.
Testing
UHV test center offers a wide range of high-voltage testing. D. L. Whitehead, C. D. Fahrnkopf, and J. J. Brado. Sept. p139-44.
See also Switchgear; Transportation.
Thermoelectric. See Air conditioning.
Training. See Computer; Nuclear energy.
Transformer
apparatus service expanded. May. Inside front cover.
dry-type. PS. July. p128.
etched core laminations produced experimentally. TP. Mar. p60.
oil-filled potential. PS. Sept. p160.
potential. PS. July. p128.
underground and pad-mounted produced in efficient new plant. Nov. Inside front cover.
Transmission line. See Relaying.
Transportation
automatic testing will simplify maintenance of rail transit vehicles. F. S. Restivo, F. W. Jones, and K. H. Fraelich, Jr. Mar. p44-9.
automatic train control concepts are implemented by modern equipment. R. C. Hoyler. Sept. p145-51.
BART service begins; São Paulo Metro cars in prototype testing. TP. Nov. p188; Back cover.
design techniques for automatic train control. R. C. Hoyler. July. p98-103.
Tampa airport passenger shuttle completes first year. TP. May. p95-6.
See also Mining; Motor; Rectifier.
Tube, electronic, display storage tube booklet. PS. Mar. p63.
Tungsten. See Lamp.
Thyristor
transformer primary control booklet. PS. Sept. p160.
See also Rectifier.

U

Underground residential distribution (URD). See Switch; Transformer.
Urban development, steps to innovative urban planning. G. T. Marcou and J. D. O'Leary, Jr. May. p66-73.

V

Valves. See Nuclear energy.
Vieux Carré. See Urban development.

W

Water chiller, packaged. PS. Jan. p31.
Welder, programmed system. PS. Jan. p31.

X

X-ray, screen amplifies images and converts them to visible patterns. TP. Jan. p30.

Author Index on next page.

Author Index

Author biographies appear on the inside back cover of each issue.

Arnold, Jr., W. H.
Standard Information Package Benefits Nuclear Plant Licensing and Construction. Sept. p130-3.

Brado, J. J.
UHV Test Center Offers a Wide Range of High-Voltage Testing. Sept. p139-144.

Cameron, Frank L.
Power Fuse Design and Application. May. p87-92.

Campbell, S. J.
Static Power Supplies with AC Machines. Mar. p34-8.

Caplan, Ralph
Illustrated Answers to the Ten Most Common Questions About Industrial Design. July. p104-9.

Colaiaco, August P.
Sine-Beat Vibration Testing Verifies Earthquake Capability of Metal Clad Switchgear. May. p82-3.

Collier, Alan R.
Floating Nuclear Power Plants for Offshore Siting. Nov. p162-9.

Elmore, W. A.
Some Guidelines for Selecting a Solid-State Transmission Line Relaying System. Mar. p50-9.

Fahrnkopf, C. D.
UHV Test Center Offers a Wide Range of High-Voltage Testing. Sept. p139-144.

Fischer, Edward G.
Sine-Beat Vibration Testing Verifies Earthquake Capability of Metal Clad Switchgear. May. p82-3.

Fraelich, Jr., Kenneth H.
Automatic Testing Will Simplify Maintenance of Rail Transit Vehicles. Mar. p44-9.

Garrett, R. S.
A Developer/Builder's View of the Housing Market. July. p110-9.

Grain, D. R.
Standard Information Package Benefits Nuclear Plant Licensing and Construction. Sept. p130-3.

Griesacker, Charles
Radiation Monitoring System for Nuclear Power Plants. Jan. p2-8.

Hamburger, Ted
Radiation Monitoring System for Nuclear Power Plants. Jan. p2-8.

Hoffman, Joseph H.
Designing Heavy-Duty Blower Rotors for Reliability. Sept. p134-8.

Hoffmann, A. H.
Evaluating Drives for Large Grinding Mills. Jan. p19-25.

Hooke, Robert
Modern Applied Mathematics and the Engineer. Jan. p9-13.

Hoyler, R. C.
Automatic Train Control Concepts Implemented by Modern Equipment. Sept. p145-51.
Design Techniques for Automatic Train Control. July. p98-103.

Hudgens, J. E.
Respiratory Heat Loss Determined in Deep Diving Tests. May. p79-81.

Izzi, Ed
Illustrated Answers to the Ten Most Common Questions About Industrial Design. July. p104-9.

Jones, Frederick W.
Automatic Testing Will Simplify Maintenance of Rail Transit Vehicles. Mar. p44-9.

Kappenhagen, George A.
Improving the Performance of Lamp Dimmers. July. p120-4.

Lane, Stephen A.
Radiation Monitoring System for Nuclear Power Plants. Jan. p2-8.

Marcou, George T.
Steps to Innovative Urban Planning. May. p66-73.

Meacham, James H.
Subminiature TV Camera. Mar. p39-43.

Nichols, Roger C.
Floating Nuclear Power Plants for Offshore Siting. Nov. p162-9.

O'Leary, Jr., Jeremiah D.
Steps to Innovative Urban Planning. May. p66-73.

Pearce, Vikram
Selecting a Process Control Computer. May. p74-8.

Peterson, Roger K.
T-Tap Switch Solves a Variety of URD Problems. Nov. p182-7.

Powers, R. E.
Side-Look Radar Provides a New Tool for Topographic and Geological Surveys. Nov. p176-81.

Restivo, Frank S.
Automatic Testing Will Simplify Maintenance of Rail Transit Vehicles. Mar. p44-9.

Rockefeller, G. D.
What Are the Prospects for Substation-Computer Relaying? Sept. p152-6.

Sell, H. G.
Strengthening Metal with Bubbles. Jan. p14-8.

Shortley, P. B.
Additional Measures of Generation Reliability. Jan. p26-7.

Smith, David R.
Power Fuse Design and Application. May. p87-92.

Stickler, R.
Strengthening Metal with Bubbles. Jan. p14-8.

Thornton, W. A.
Relating Commercial Uses of Color to Human Color Vision. Nov. p170-5.

Trasky, J. G.
Evaluating Drives for Large Grinding Mills. Jan. p19-25.

Whitehead, D. L.
UHV Test Center Offers a Wide Range of High-Voltage Testing. Sept. p139-144.